

THE SELLING OF SALT: GAZING TOO LONG INTO THE ABYSS

by

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No more inappropriate advice can be offered to 20th-century strategic analysts appraising the SALT II treaty than Robert Schumann's 19th-century advice to music critics attempting to appraise a Beethoven concerto: "The best discourse upon music is silence." Music is a medium so direct and universal in its impact that no discourse or interpretive statements are required. The language of SALT, however, is far from universal. Careful reading of the treaty is of little help in unraveling the complexities of perhaps the most technical international agreement ever entered into by our government. Public discussion of the treaty is consequently an essential element in the process of clarifying critical strategic issues; from this process will emerge, one hopes, a clear national consensus regarding the merits of our nation's most recent strategic accord.

Few externally imposed constraints on our strategic arsenal will be more important for the maintenance of perceived and actual strategic equivalence than the SALT II treaty. Discourse upon the treaty thus assumes particular importance as the US faces the reality of a ratified document, politically charged renegotiations, or both in the years ahead. This essay is intended to contribute to that discourse. The sections following will analyze the two principal criticisms of SALT II and assess the direction the two nations might take in SALT III in light of the incomplete resolution of some of the

thorniest issues addressed during SALT II negotiations.

No prescriptive advice will be offered regarding possible amendments to the treaty. Clearly, improvements to the treaty can be suggested by even a casual observer of recent SALT history. In all likelihood, amendments will be proposed from many sources in the months ahead cumulatively exceeding the 44 pages of the basic SALT II agreement itself. At issue is whether such amendments stand any reasonable chance of surviving the renegotiation process that would be necessary. However, rather than speculate on the welter of outcomes which might result from the possible amendments, this essay will simply assess the document signed by the two heads of state on 18 June 1979. Areas of concern will be emphasized; however, in spite of these concerns, it is the central thesis of this essay that ratification of the SALT II document—unmodified by amendments, reservations, side agreements, codicils, or interpretive statements—is in the decided interest of the US.

Although the emerging debate is disturbingly hysterical in some quarters, it is remarkably positive in one respect: the discussion has centered on treaty provisions, not treaty process. Some observers, no doubt recalling that the legislative debate preceding the ratification of SALT I highlighted alleged "secret agreements" and "personal, one man diplomacy," expected similar "process" debate in 1979.¹ While such debate may yet

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emerge, most of the discussion to date has concerned particular treaty provisions and the security implications of those provisions.

In this context, responsible treaty debate has centered on two contentions of treaty opponents:

- First, that the treaty is really of little arms control significance and consequently should be leapfrogged in favor of more meaningful arms control pacts.

- Second, that the agreement is either *prima facie* inequitable, or, if equitable on its face, will undermine our willingness to engage in necessary modernization permitted under the treaty, thus aggravating an already serious decline in US strategic capability relative to that of the Soviets.

Before discussing these two contentions, it may be useful to summarize the key features of the recently concluded agreement.

The SALT II agreement was shaped by two major "breakthroughs" during the seven-year period leading to the 18 June 1979 signing: the 1974 Vladivostok Accord, signed by President Ford and General Secretary Brezhnev, and the May 1977 "conceptual breakthrough" announced following the Vance-Gromyko meetings held that month. Each of these developments left a lasting imprint on the agreement which eventually emerged. The Vladivostok Accord established the broad numerical limits which were codified at Vienna and which would be effective through 1985: a 2400-unit limit on the aggregate of intercontinental and sea-launched ballistic missiles (ICBMs and SLBMs), heavy bombers, and long-range air-launched ballistic missiles; and a 1320-unit limit on MIRVed missiles (missiles equipped with multiple, independently targetable reentry vehicles). As significant as the Vladivostok Accord was in establishing the principle of equality in overall numbers, it left many issues unresolved, including such important considerations as cruise missiles, the new Soviet Backfire bomber, mobile ICBMs, and verification means.

Not until May 1977 was a framework established which permitted resolution of

these issues. The May 1977 breakthrough resulted in the "three-tiered approach": the basic Vladivostok understandings, to last through 1985; a Protocol, to last only until 1981, which would incorporate the most contentious outstanding issues (mobile ICBMs and cruise missiles); and finally, a Joint Statement of Principles, which would act as a guideline for negotiations during SALT III. It took more than two years to complete the details of the framework, but the treaty still incorporates the "three tiers" hammered out by Vance and Gromyko in the wake of the initial, and abortive, Carter Administration SALT proposals earlier in 1977.

The major modifications to the Vladivostok Accord, as reflected in the final treaty, included agreements to reduce the 2400 aggregate to 2250 by 1981 and to include heavy bombers equipped for long-range cruise missiles (those with a range of more than 600 kilometers) in the 1320 MIRV ceiling. Separate sublimits were also established on MIRVed missiles (1200) and MIRVed ICBMs (820). In addition, a "new types" limit was imposed, restricting each side to the flight testing and deployment of only one new type of light ICBM during the period of the agreement.

The Protocol, which would remain in force through December 1981, bans deployment (but not testing) of long-range sea-launched and ground-launched cruise missiles (SLCMs and GLCMs). The Protocol also includes a ban on flight testing and deployment of mobile ICBMs, although missile development and launcher testing can continue.

Finally, the Joint Statement of Principles commits the two sides to pursue "significant and substantial reductions" during the next SALT round, as well as to continue to pursue qualitative limits such as the SALT II "new types" limit. The Backfire bomber was omitted from any of the "three tiers," although Brezhnev handed President Carter a written statement during the Vienna Summit committing the Soviet Union not to increase the production rate of the Backfire from its current level of 30 per year and not to increase the radius of action of the aircraft

through such means as in-flight refueling. The US stated that it considered the Soviet Backfire commitment to be essential to the obligations assumed under the treaty and that it was entering into the SALT II agreement on the basis of the commitments contained in the Soviet statement.²

ARMS LEGITIMATION?

The first argument against the agreement—that SALT II is “arms legitimation” and not “arms limitation”—overlooks the significant advances since SALT I in placing limits on a substantially broader category of arms than that covered under the 1972 Interim Agreement. These steps, together with the equal limits placed on aggregate numbers, facilitate reductions in strategic totals during successive phases of SALT.

Some of the most significant extensions of offensive limitations from SALT I are:

- The inclusion of heavy bombers within the ceiling on numbers of strategic nuclear delivery vehicles.
- A ceiling that will require dismantling of operational strategic nuclear weapons.
- Sublimits on the most destabilizing elements of the offensive arsenal, MIRV launchers (particularly MIRVed ICBM launchers).
- Indirect limitations on missile throw-weight and an agreement limiting the size of future increases in “light” and “heavy” ICBMs.³
- Agreement to ban completely the development, testing, and deployment of whole categories of new weapons systems, including, for example, “FOBS” (Fractional Orbital Bombardment Systems), “Creepy Crawlers” (fixed and mobile missiles launched from the seabed), and long-range ballistic missiles on surface ships.

From the standpoint of arms control, more inclusive and more constraining limitations would obviously have been desirable. However, given the vital national stakes that are involved in every set of proposals and counterproposals (and the unfortunate labeling of SALT as the “centerpiece” of US-Soviet relations), the seven-year gestation

period required to produce a SALT II agreement of more modest results than some would have hoped for is hardly surprising. By comparison, it took the superpowers nearly 11 years to extend the 1963 Limited Test Ban Treaty—which banned nuclear weapon tests in the atmosphere, in outer space, and under water—so as to cover certain categories of underground explosions; the resulting agreements, the 1974 Threshold Test Ban Treaty and its 1976 companion Treaty on Underground Nuclear Explosions for Peaceful Purposes, have yet to enter into force, although the two sides have agreed to abide by their provisions pending completion of a more comprehensive testing agreement. As important as the 1963 and 1974 testing treaties were, however, they were still far less significant strategically and less ambitious in the area of armaments constraints than the SALT I and SALT II agreements. No weapons or weapon programs were directly affected by the testing agreements, and the negotiations leading to those agreements were never burdened with the requirement to reflect every whim in the evolving superpower dialogue.

Further, allied views appear to have played a much more substantial role in the shaping of US positions during SALT II than they did during the negotiation of the testing agreements. SALT II, while currently endorsed by nearly all US allies, was apparently the subject of initial allied

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concern, particularly with regard to cruise missile limits.⁴ These concerns of course contributed to further delays in hammering out acceptable limits, and the attention paid them suggests that allied involvement may become a regular feature of future rounds of SALT as "gray area" weapons of immediate allied interest increase in importance. Such involvement, admittedly vital to the maintenance of allied unity, is hardly consistent with expectations of accelerated SALT results.

Other important but less obvious factors explain the circumscribed results of SALT II. First, some of the elements of strategic competition that it would have been most desirable to harness, from the standpoints of both crisis stability and arms race stability, could not be constrained without causing potentially severe effects on purely tactical systems. Strategic air defense limits provide an excellent example. The pace of Soviet activity in this area has been prodigious since SALT I was signed;⁵ extending the severe SALT I constraints on antimissile systems to include strategic air defense systems would have assured the continued effectiveness of all elements of US retaliatory forces. Yet drafting limits which would verifiably accomplish this objective without affecting or being undermined by legitimate tactical deployments has eluded negotiators since SALT I. Strategic air defense limits were therefore not pursued, nor were other strategic defensive limits (for example, strategic antisubmarine warfare constraints) that doctrinally appeared attractive. SALT II can hardly be blamed for these self-limiting measures which, if pursued, would have led to interminable definitional issues with no prospect of success.

A second reason for the relative modesty of SALT II's coverage is the fact that it is merely part of a continuing process, not the end result. Indeed, one of the principal breakthroughs achieved in the 1974 Vladivostok Accord was the recognition that trying to resolve all remaining offensive arms limitation issues in a treaty of indefinite

duration posed insurmountable problems. The goal at Vladivostok of achieving an agreement to last through 1985 was seen as an effective vehicle for constraining known systems while leaving for future rounds discussions of limitations on systems still on the drawing board. Even so, SALT II was nearly aborted by the rapidly changing nature of one system which technology seemed to improve literally by the month: cruise missiles. Only by deferring the negotiation of limits on the long-range cruise missile variants (SLCMs and GLCMs), which were most in need of mission and role analysis, was the logjam on this important issue finally broken. Given the stakes involved, neither country can be expected to acquiesce readily in constraints on new systems for which one side may feel a comparative advantage; if the proper role for new systems is still being examined, it is better to codify incrementally those issues upon which agreement can be reached while continuing to search for more permanent limitations on the developing systems.

Delaying SALT II or leapfrogging to SALT III in an effort to accelerate the pace and breadth of arms control would deny both sides the sensible advantages which the agreement promises now. By introducing a quagmire of technological projections and military assessments, such moves would also risk undermining the very process intended ultimately to produce an ideal agreement.

In retrospect, it is unfortunate that SALT II negotiators were unable to deal more effectively with the problems of fixed ICBM survivability, thereby precluding new programs of the type represented by the MX missile. But reasonable arms control solutions in this significant area may have been impossible by the time SALT II negotiations got underway in 1972. Since it was clear early on that the Soviets would not agree to forgo MIRVs entirely,⁶ the need was to devise a series of verifiable qualitative constraints—testing limits and rigid new-types prohibitions—that would ensure that accuracy improvements required for high-confidence counterforce targeting would be indefinitely delayed. Two problems were

encountered with this approach. First, the US had already attained the requisite accuracies⁷ (albeit weapons were deployed in insufficient numbers to pose a significant first-strike threat to the Soviets), and the Soviet Union was apparently determined to continue qualitative refinements until it had achieved comparable accuracy levels. Ensuring ICBM survivability through a freeze on accuracy improvements was probably viewed by Soviet negotiators, stability arguments notwithstanding, as a US attempt to freeze them out of an efficient hard-target capability. Second, verification considerations appeared to rule out limitations on all but the most obvious missile parameters: missile size, weight, number of stages, and type of fuel. Monitoring the critical elements which determine missile accuracy (gyros, on-board computers, warhead dispensing mechanisms, warhead ballistic characteristics) was beyond the capability of current US national technical means.⁸ In any event, these problems were moot by the time the Carter Administration began to appreciate them: by then, the Soviets had begun to deploy missile variants with accuracy sufficient to threaten a substantial fraction of the Minuteman force.⁹ The horse was already out of the barn, and no arms control solution was likely to get the horse back in.¹⁰

SALT II represents, in short, a major step forward in arms control from the limited offensive arms control measures of SALT I. Even though measures to improve crisis stability significantly were not achieved, arms race stability has unquestionably been enhanced, and opportunities remain in future rounds to move to even more substantial arms control measures. Judged by the record of other arms control pacts with follow-on agreements of lesser scope and strategic significance, the SALT II achievements are major ones. It would be unfortunate indeed if criticism of SALT II for its limited gains should contribute to its defeat by those skeptical of arms control in nearly any form.

AN UNEQUAL AGREEMENT UNEQUALLY ARRIVED AT?

The more unsettling of the two allegations

regarding SALT II is that it is *prima facie* inequitable, but that it may nonetheless threaten US willingness to engage in necessary strategic modernization and thus contribute to, not correct, the disturbing shift in favor of the Soviets according to nearly every measure of strategic effectiveness. This critique suggests that SALT II poses a fundamental threat to US security interests.

Such a threat, if it does materialize, should not be laid at SALT's doorstep. As was pointed out by Jan Lodal,

The strategic balance in the mid-1980's is likely to be determined to a much greater extent by the force deployment programs of the two sides than it is by the provisions of arms control agreements. Thus it is important that the United States retain the flexibility it needs to undertake programs that will maintain this balance.¹¹

SALT II provides this flexibility. Without arms control measures to solve the problem of fixed ICBM survivability, a multiple basing ICBM option is the most likely programmatic response; SALT II permits this. Given the improvements in Soviet air defense capabilities since SALT I and the difficulties in bringing such capabilities under the SALT umbrella, a modernized "air breathing leg" of our strategic triad is required; SALT II permits this, either in the form of long-range air-launched cruise missiles or a modern penetrating bomber. To ensure continued SLBM survivability in the open ocean, longer-range SLBMs are a critical addition to our strategic arsenal. Again, SALT II permits this. Finally, America's allies should not be denied the opportunity to share in the technological developments afforded by the latest generation of precision-guided munitions, particularly cruise missiles. SALT II's "non-circumvention" provision, which will be discussed in a subsequent section of this essay, would apparently allow this.

Parenthetically, we should note that a severe limitation of each of the US modernization efforts mentioned above—MX mobile missile, air-launched cruise

missile, Trident submarine, and technology-sharing—had been, at one time or another, a major Soviet SALT II objective.¹² That the US successfully resisted such efforts is an indication that US negotiators did protect vital military programs indispensable to the maintenance of strategic equivalence.

Providing the opportunity to modernize under SALT II does not, of course, guarantee that necessary modernization efforts will actually be carried out. Indeed, one of the major criticisms of SALT II has been that the agreement will lull the US into believing it can forgo some, if not all, of the modernization initiatives permitted under the treaty. To bolster this point, some have argued that our record of modernization under SALT I gives little assurance that the record will be any different under SALT II.¹³ However, upon closer examination of the scope and nature of US strategic modernization efforts since SALT I was signed in 1972, there appears to be no basis *a priori* for concluding that US efforts under SALT II will be insufficient. Three factors are relevant in any attempt to extrapolate from the US experience under SALT I as a basis for projecting modernization efforts under SALT II. First, the perverse effect on all defense spending produced by US disenchantment with the Vietnam War made increases in strategic outlays extremely difficult. Only after the nature of Soviet strategic modernization efforts became known well into the life of SALT I was sufficient public and congressional opinion galvanized to produce direct impacts on the defense budget. The new-found awareness of defense issues in general and strategic spending in particular is suggestive, underscoring the point that the previous SALT environment has indeed been compatible with US willingness to increase strategic expenditures when military necessity dictates. Thus, as the trauma of Vietnam fades, it seems clear that a sober national assessment of military needs can be made independent of SALT, and that this assessment can be translated to real dollar outlays for strategic programs.

Second, the cycle of strategic deployments in the US may have contributed to the illusion

that SALT I was responsible for attenuated strategic modernization efforts during the years in which the Interim Agreement was operative. Few completely new US systems were put on line during the 1972-79 period; most of the modernization efforts (Minuteman III and Poseidon SLBM deployments) represented continuations of strategic offensive programs already underway.¹⁴ On the other hand, an entirely new family of weapons (Trident submarine, Trident I missile, cruise missiles) was developed throughout SALT I, with deployments projected during the period of the SALT II treaty. SALT I, in short, coincided with a lull in the introduction of new US hardware.¹⁵ The Soviet strategic deployment cycle was differently phased. The new-generation Soviet ICBMs, for example, were all flight-tested within one year after SALT I was signed,¹⁶ and the Soviets actively deployed both SLBMs and ICBMs throughout the Interim Agreement period. Those who would blame SALT I for these cyclic disparities overlook the fact that the strategic decisionmaking which produced visible strategic deployments of the 1970's took place years before SALT I was signed and thus had little to do with SALT constraints or the political climate associated with SALT.

The third point bearing on efforts to correlate SALT I with rationalizations not to build needed weapons is the fact that while US modernization efforts after SALT I were unquestionably less ambitious than Soviet efforts, they were by no means insignificant. As Paul Warnke, former Director of the Arms Control and Disarmament Agency, has pointed out on numerous occasions, the US added an average of nearly three warheads to its strategic offensive arsenal each day of SALT I's existence.¹⁷ Of course these additions were the result of Minuteman III and Poseidon SLBM deployments conceived before SALT, but they represent significant qualitative and quantitative improvements to our arsenal nonetheless. Other strategic offensive improvements undertaken during the Interim Agreement of SALT I included the "silo upgrade" program to reduce the

vulnerability of Minuteman ICBM silos, the satellite (inland) basing of B-52s to improve survivability, the introduction of nearly 1100 operational short-range attack missiles (SRAM) to elements of the B-52 and FB-111 fleets, and wing-strengthening programs for older B-52s.¹⁸ These programs collectively represent only a fraction of the Soviet deployment effort during this same period; however, when taken together with US development efforts during this period, these programs reflect a US willingness to persevere in the fateful strategic weapons competition that had been predicted for continuation with or without SALT.¹⁹

Although the issues of program flexibility within the treaty and US willingness to modernize under the treaty are important, the central argument of the second critique is that the agreement is *prima facie* inequitable. Elements of the agreement singled out for particular criticism in this regard are the "heavy" missile, the Backfire, and the verification provisions of the treaty, as well as the entire Protocol. These elements, and associated criticisms, must be examined in detail.

Heavy ICBMs

The SALT II treaty carries over from the Interim Agreement of SALT I the codification of a Soviet advantage in heavy ICBMs. Article IV of the new treaty, paralleling Article II of the Interim Agreement, prohibits each side from converting launchers of "light" ICBMs into launchers of "heavy" ICBMs. (The new treaty defines a heavy ICBM as any ICBM with a launch-weight or throw-weight greater than the largest light ICBM currently deployed; the largest current light ICBM is the Soviet SS-19, with a throw-weight of approximately 6000 to 7000 pounds).²⁰ In combination with other treaty provisions prohibiting the construction of new ICBM silo launchers, SALT II, like SALT I, will freeze the US out of heavy ICBM launchers while permitting the Soviets to retain the heavy ICBMs in their inventory (approximately 300).²¹ Since the heavy missile

provisions of the SALT II treaty are the only instances in the agreement lasting to 1985 which deny the US the ability, if it wished, to match the Soviets system-for-system, they have drawn understandable attention. The attention and criticism would be deserved if heavy ICBMs gave the Soviets a militarily useful capability beyond that attainable by the US at the aggregate weapons levels negotiated in SALT II. They do not.

The additional payload represented by the heavy ICBM fleet has two potential military implications: in the absence of more accurate guidance systems, the larger warheads can, to some extent, offset guidance imperfections by achieving damage effects against point targets equivalent to those produced by smaller but more accurate missiles; further, the larger payload can be converted to a large number of independently targeted warheads, thus giving the Soviets a warhead potential which the US could not hope to match even under the most aggressive modernization program. (Indeed, some estimates of the warhead potential of the new Soviet SS-18 heavy ICBM range as high as 40.)²² However, technology and other SALT treaty provisions undercut the significance of both of these heavy ICBM implications. First, the Soviets have already achieved ICBM guidance accuracies which give them an efficient hard-target capability even without the large-yield warheads of their ICBM fleet.²³ The US attained such accuracies long ago²⁴ and hence was able to deploy missiles as small as the Minuteman (with roughly one-eighth the payload capability of the SS-18) to accomplish any conceivable military mission. Second, SALT II includes a warhead ceiling provision (Article IV) which restricts the warhead totals on the SS-18 to 10; equally important, the same article gives the US the right to equip the one new ICBM permitted during the treaty with that same number of warheads. The concern over codified warhead asymmetries in favor of the Soviets, which retention of the heavy ICBM represents, is thus ill-founded.

It is true, however, that if aggregate levels are substantially reduced in future SALT rounds, the existence of the Soviet heavy

ICBM force may pose essential equivalence problems of a different nature. This issue will be discussed in the section on SALT III below.

The Backfire

Unlike criticism of the heavy ICBM, the criticism surrounding treatment of the new Soviet Backfire "medium-range" bomber does not focus on a codified SALT asymmetry; the US is presumably free to develop and deploy a similar aircraft, subject to constraints similar to those imposed on the Backfire (for example, production rate limits and refueling capability prohibitions). Instead, the concern centers on conceding to the Soviets a system outside of SALT which has marginal strategic capability while accepting limits, albeit temporary and non-constraining, on systems designed solely for tactical or theater use—SLCMs and GLCMs.

The Backfire issue has vexed SALT negotiators since the Vladivostok agreement was announced in 1974. The Soviets seemed clearly to have intended Backfire for intra-theater roles as a replacement for its aging Badger medium-range bomber fleet. Yet, the Backfire aircraft exhibits performance characteristics superior to those of some aircraft which the two sides readily agreed would count as heavy bombers, for example, the Soviet Bison.²⁵ In retrospect, Soviet intransigence on Backfire seems explainable, at least in part, on the basis of Soviet concessions early in SALT II. Specifically, the Soviets agreed that US forward-based systems (F-111s in the United Kingdom and carrier-based aircraft in the Mediterranean) which could theoretically strike the Soviet homeland, as well as the nuclear weapons of Britain and France, would not be accounted for in the overall Vladivostok ceilings. These weapons, as well as the Strategic Air Command's FB-111s based in the US, which are not included in the strategic totals, are probably viewed by the Soviets at least as seriously as the US views the potential intercontinental Backfire threat.

Obviously it would have been preferable to obtain Soviet acceptance of US proposals to

count the Backfire, but leaving the Backfire essentially unconstrained poses interesting deployment options for the US. One such approach would entail operating a Backfire-sized aircraft in a sea-control role as a cruise missile platform for short-range (less than 600 kilometer) air-launched cruise missiles.²⁶ If such an option becomes a cost-effective means of maintaining open sea routes to America's European and Asian allies, the precedent of excluding an aircraft of Backfire's acknowledged capabilities from SALT may prove useful.

The Protocol

Designed as a method to shelve the thorniest of SALT II issues temporarily, the Protocol has drawn fire for establishing important precedents which may be disadvantageous for the US when follow-on SALT III limits are established. Chief among these precedents are the Protocol deployment bans on mobile ICBMs, SLCMs, and GLCMs. The precedent issue is particularly worrisome in international negotiating arenas, where participants search intently for whatever bargaining advantages accrue by virtue of earlier concessions made by bargaining opponents. In the case of mobile ICBMs, however, the concern seems misplaced. The US sought and successfully achieved Soviet agreement to a statement in the treaty itself specifically designed to forestall Soviet attempts to use the precedent of mobile ICBM bans in the Protocol as a lever for continuing the ban following the Protocol's expiration. The statement stipulates that after the Protocol expires, mobiles will be subject to the same limitations in the treaty as all other ICBM launchers (in effect counted in the aggregate), unless the two sides have already agreed that mobiles will be banned.

No such disclaimer or clarification was attached to the Protocol ban on deployments of SLCMs and GLCMs. Given the pace of Soviet programs which the SLCM and GLCM are designed to offset (the SS-20 intermediate-range ballistic missile and the Backfire) and the absence of meaningful

SALT limits on these systems, a basic issue of equity seems to be involved, particularly if the US hopes to obtain leverage in SALT III to constrain the Soviet "gray area" theater nuclear weapons or forestall continued deployment restrictions on SLCMs and GLCMs. It clearly would have been in the interest of the US to avoid this unequal treatment of particular theater systems, but other features of the Protocol and treaty have been designed to minimize the Protocol's impact on SLCMs and GLCMs. First, the treaty stipulates that Soviet reductions to the 2250 level must be completed coincident with the Protocol's expiration. This is a subtle, yet significant, SALT outcome: it ensures that the Soviets will not be able to hold reductions to lower aggregate levels hostage to what they consider favorable outcomes on the issue of SLCM and GLCM limits. Second, development and testing of long-range SLCMs and GLCMs can proceed completely unconstrained by SALT. Further, since long-range SLCMs and GLCMs will not be ready for deployment until after the Protocol expires,²⁷ the impact of Protocol limits on these programs is insignificant.

The SALT I experience with precedents may be usefully considered in this regard. SALT I placed strict "non-transfer" limits on antiballistic missile (ABM) components; the 1972 agreement obligated both parties not to transfer ABM components to other nations. Concerned that this non-transfer provision might establish a precedent on offensive limitations and hence interfere with continuing programs of cooperation with allies, the US unilaterally declared in 1972 that the non-transfer provisions regarding defensive systems did not establish a precedent for the handling of offensive systems. Judging by the outcome of the non-transfer issue in SALT II, the US succeeded. Open reports indicated that the Soviets had initially insisted on a strict non-transfer provision for SALT II along the lines of the ABM treaty.²⁸ However, the final outcome of this issue, as reflected in Article XII of the treaty,²⁹ seems to represent a substantial Soviet retreat from its earlier position. "Non-transfer" is not even mentioned in the new

agreement. The far more ambiguous term "non-circumvention" is used instead, and the obligations of the parties merely "not to circumvent the provisions" of the treaty "through any other state" would appear to allow substantial US latitude in the event we wished to share technological developments on new systems with allies. The outcome of the non-transfer issue underscores the success that can be achieved, in the face of clear precedents to the contrary, in negotiating successful solutions to outstanding issues of obvious importance to the US.

Verification

To present a comprehensive treatment of verification capabilities and verification issues in this essay is not feasible, considering that US monitoring capabilities are highly classified, and that open debate on the merits of these capabilities would obviously undermine the very systems being debated.³⁰ Appropriate verification information must be provided to relevant Senate committees responsible for inquiries into the merits of the SALT II treaty, of course. In addition, despite the unquestioned importance of ensuring that particular hardware systems can adequately monitor Soviet activities under SALT II, an equally significant determinant of successful verification will ultimately be the Standing Consultative Commission (SCC). This little-known but important US-Soviet commission was created in 1972 by the SALT I agreement "to promote the objectives and implementation of the Treaty."³¹ The SCC will continue in force during the SALT II agreement, with even more critical responsibilities than under SALT I.³² Verification disputes will be presented, and ultimately resolved, in this arena. Successes in resolving verification ambiguities will thus continue to be determined as much by the effectiveness of the international political system, reflected in bodies such as the SCC, and by the persistence of US negotiators in performing within this system, as by the capabilities of particular hardware monitoring systems. National debates about the evident need for

US negotiators to be persistent are likely to be especially unproductive.

Another verification issue in the new treaty may be troublesome, however. Hardware capability and negotiator persistence are merely adjuncts, in a legal sense, to treaty language. The ability of one side to make a treaty violation stick begins with how carefully the two sides have crafted particular treaty constraints. In this regard, the SALT record is mixed. An impressive array of detailed treaty language has been marshaled to support the new, broadened limits of SALT II: MIRV missile and MIRV launcher "counting rules" to aid in distinguishing missiles that are not MIRVed from versions subject to SALT's MIRV ceilings; bomber "counting rules" to ensure visible, functionally related distinctions between aircraft subject to SALT II's overall ceilings and MIRV sublimits and those not included; and provisions sanctioning the continued use of "national technical means" (for example, satellite photography) to ensure SALT compliance. The "national technical means" provision contains related stipulations outlawing interference with national technical means, deliberate concealment measures, and telemetric encryption (the encoding of electronic data transmitted from missiles during test flights) "whenever such [encoding] impedes verification of compliance with the provisions of the Treaty." Here a problem arises. The nature of the language governing telemetric encryption is such that the Soviets might easily claim that encryption actually undertaken did not impede verification of a particular treaty provision, and hence was not banned.³³ Yet, how is the US to know whether encryption actually relates to a SALT II treaty provision if it is granted access to some but not all of the data? Providing examples of sanctioned or forbidden behavior, as the US apparently has done,³⁴ helps only with currently understood problems; it does little to assist with inevitable future ambiguities and the legal machinations that will flow from those ambiguities. In the end, ultimate resolution of ambiguities caused by the provision will

rest on the shoulders of the US commissioner to the SCC. His persistence, and the support given him by the national leadership, will determine eventual resolution. Yet his task, burdensome at best, could have been greatly facilitated had the encryption agreement been broadened to preclude encryption of all types.

In summary, the second criticism of SALT II—that it is *prima facie* inequitable—raises disturbing but ultimately accommodatable issues. The only codified asymmetry concerns a hardware system (heavy ICBMs) which we would, in all likelihood, not deploy even if we were permitted to do so; in addition, the military advantage of this system in relation to US systems at the aggregate levels of the treaty has been effectively neutralized by other provisions of the treaty. The exclusion of the Backfire from central SALT limits would preferably have been avoided. However, the Backfire is part of a larger "gray area systems" debate which includes US programs as well, and it seems destined for further wrangling in SALT III. Furthermore, Backfire's exclusion leaves an interesting set of deployment options for the US in the event a military need develops for an aircraft approximating Backfire's capabilities. Finally, the Protocol, while establishing potentially disturbing precedents, has been deliberately tailored to minimize the direct impact on US programs affected by the Protocol (mobile ICBMs, SLCMs, and GLCMs). SALT I offers further encouragement that adverse precedents of the type found in the Protocol can be avoided in cases where clear issues of equivalence or military need are at stake.

Against the objections to SALT II's provisions must be balanced the achievements of US negotiators in securing Soviet agreement to meaningful reductions in their nuclear launcher total, to ceilings on the most destabilizing launcher elements, and to significant qualitative limitations on broad categories of strategic weapons. These achievements reflect nearly every US

negotiating objective throughout SALT II. That they do not reflect the totality of those objectives is due to the real-world nature of the negotiations themselves: the US is not negotiating in a vacuum, but with a party perceiving a widely different set of interests and objectives. As West German Chancellor Helmut Schmidt, an ardent supporter of SALT II, has stated:

SALT II can be concluded only in the form of a compromise . . . if everyone involved will accept something that is not fully in line with their interests. It is necessary to differentiate between critical remarks involving individual aspects of this package and the great world political significance of the whole Treaty—otherwise the world will suffer a most serious confidence crisis.³⁵

SALT III—A LOOK AHEAD

In view of the virtual certainty of continued negotiations on offensive weaponry regardless of the outcome of the ratification issue, and in view of the necessarily incomplete resolution of some issues in SALT II, we are led to two salient observations regarding the SALT process in the years ahead. First, if the avowed goals of Presidents Carter and Brezhnev are achieved and future rounds of SALT succeed in reducing significantly the strategic launcher totals of both sides, problems which could be dismissed or concessions made relatively easily at the aggregate levels of SALT II will be progressively more difficult to resolve at lower aggregate levels. Verification and the heavy ICBM asymmetry are two cases in point. Verification uncertainties which may have little strategic consequence at the 2400 and 2250 levels will be magnified in military and political importance at levels one-half to two-thirds of these SALT II totals. And, while the heavy ICBM asymmetry is of little consequence presently, at deeply reduced levels the large number of outsized warheads carried on this missile fleet could cede to the Soviets important perceived advantages quite apart from any militarily useful applications which such megatonnage might represent.

The foregoing considerations suggest that the easy answers we have been giving for 10 years to these two problems, among others, will be of little relevance in future rounds of SALT. They do not suggest, however, that the arms control process should be abandoned.

Second, adjustments to the SALT process must be made to shorten substantially the seven- to eight-year gestation cycle for the creation of new agreements. In part, this cycle was determined during SALT II by adherence of the conferees to the "nothing is agreed until all is agreed" negotiating approach. This approach to concluding agreements has certain obvious advantages, the most important being that bargaining leverage in the "end game" can be applied by threatening to unravel that which had been wrapped up months or years previously. The danger with this approach is that mutually beneficial provisions of a new agreement, many of which have nothing to do with the issues holding up treaty completion, may be rendered useless by technological breakthroughs. Technological developments wreaked havoc with the SALT II negotiations, particularly affecting the "new types" and cruise missile issues and seriously threatening eventual treaty completion. The pace of technological developments during the 1980's will likely be at least as rapid as it was in the 1970's. If the entire SALT process is not to be held hostage to technological developments, a method of accelerating the pace of SALT negotiations must be instituted. Abandoning the "nothing is agreed" approach is impractical; however, the impact of this approach on the SALT agreement cycle can be reduced by focusing negotiating efforts on incremental achievements along the road to more permanent agreements. The expiration of the Protocol in December 1981 will provide one such opportunity to test this incremental approach. Negotiators can choose now whether to confine themselves to the narrow set of issues reflected by the Protocol or to broaden their discussions substantially. The SALT II experience suggests that negotiating efforts over the intervening two years should be focused on the Protocol issues exclusively;

negotiators should resist temptations to include other objectives, such as deeper reductions or further qualitative restraints. Emphasizing modest, short-term results may be disagreeable to arms control proponents; however, such an approach increases the likelihood that those promising proposals under discussion will be codified and implemented before being undermined by technological breakthroughs. While this recommendation may appear timid in the face of pressing arms control problems, in the long run it offers greater prospects for preserving the worthwhile 10-year efforts of the two sides in controlling the competition in strategic weaponry.

CONCLUSION

The treaty assessments provided in this essay have emphasized strategic programs and capabilities, bargaining processes and advantages, and perceptions of strategic equivalence. Never mentioned, but always lurking behind every assessment, is the sobering realization of what is at stake in these endeavors and what failure suggests: a possible return to a pernicious era of weapons competition and a hardening of political attitudes reminiscent of the chilliest years of the cold war. That the consequences of miscalculation now are immeasurably more serious in human terms than they were during the 1950's lends even more significance to the undertakings of the two sides, and particularly to the constitutional role of the Senate.

With such momentous issues at stake, policymakers might profitably recall the Nietzschean phrase which haunted a young American President during the nuclear confrontation of 1962: "If thou gaze too long into the abyss, the abyss will gaze into thee."³⁶

NOTES

1. Jan M. Lodal, "SALT II and American Security," *Foreign Affairs*, 57 (Winter 1978-79), 246.
2. "Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Strategic Offensive Arms (together with the Protocol to the

Treaty and other related documents)," signed in Vienna, 18 June 1979.

3. The throw-weight and MIRV definitions, which give substance to the payload and MIRV limits, are significant achievements in their own right. Both definitions eluded SALT I negotiators; the present achievement, besides introducing significant qualitative limits into SALT, reflects Soviet acceptance of US insistence on greater precision in the elements comprising a negotiated arms limitation agreement. The MIRV definition alone, with its associated agreed-upon statements and common understandings, is nearly as long as the complete 1972 Interim Offensive Agreement.

4. See Murrey Marder, "Concessions by Soviets Would Widen Tests of Cruise Missiles," *The Washington Post*, 19 November 1977, p. 9.

5. US Arms Control and Disarmament Agency, *15th Annual Report to the Congress*, July 1976, p. 9.

6. Jan M. Lodal, "Verifying SALT," *Foreign Policy* (No. 24, Fall 1976), 50.

7. Richard Burt, "The Risks of Asking SALT to Do Too Much," *The Washington Review of Strategic and International Studies*, 1 (January 1978), 24.

8. Lodal, "Verifying SALT," pp. 62-63.

9. Burt, p. 25.

10. Paul Nitze proposed an ingenious quantitative arms control solution to the problem of ICBM vulnerability. His proposal, which would limit the opposed ICBM fleets to 5000 single-warhead missiles, each with a throw-weight of 1000 pounds, would have entailed massive programmatic adjustments by both sides. Nevertheless, in view of the cost and likely scope of the MX program, Nitze's alternative appears increasingly attractive, and has the obvious advantage of entailing far fewer verification uncertainties than the "multiple aim point" option upon which the MX is based. See Richard Burt, "Reducing Strategic Arms at SALT: How Difficult, How Important?" *Adelphi Papers*, No. 141 (London: International Institute for Strategic Studies, 1978), p. 14.

11. Lodal, "SALT II and American Security," p. 258.

12. Strobe Talbott, "Who Conceded What to Whom," *Time*, 21 May 1979, pp. 25-35; "Movable Beast," *Time*, 18 June 1979, p. 18; Lodal, "SALT II and American Security," pp. 247, 259.

13. Gerard Smith, "SALT Perspectives," speech before the Conference on US Security and the Soviet Challenge, in New Orleans, 20 April 1979, p. 9.

14. US Congress, Congressional Budget Office, *SALT and the US Strategic Forces Budget*, by Charles A. Sorrels, Background Paper No. 8 (Washington: US Government Printing Office, 23 June 1976), p. 23.

15. SALT I did, of course, directly reduce the strategic forces budget in a pronounced way: the Safeguard ABM program was sharply reduced. Strategic offensive programs, however, were unaffected by direct SALT limitations.

16. Sorrels, p. 17.

17. US strategic warhead totals were just under 6000 in 1972 and slightly over 10,300 in 1977. See Les Aspin, "Comparing Soviet and American Defense Efforts," *NATO's Fifteen Nations*, 21 (June-July 1976), 40; Archie L. Wood, "Modernizing the Strategic Bomber Force Without Really Trying—A Case Against the B-1," *International Security*, 1 (Fall 1976), 101.

18. *SALT and the US Strategic Forces Budget*, p. 23.

19. Smith, p. 1.

20. *The Military Balance, 1976-1977* (London: International Institute for Strategic Studies, 1976), p. 73.

21. *Ibid.*

22. Talbott, p. 35.

23. Lodal, "SALT II and American Security," p. 255; Burt, "The Risks of Asking SALT to Do Too Much," p. 24.

24. See for example, "The \$100 Million Mobile Missile: The MX and the Future of U.S. Strategic Forces," *The Defense Monitor*, 6 (August 1977), 3.

25. John W. R. Taylor, ed., *Jane's All the World's Aircraft 1977-78* (New York: Franklin Watts, 1977), pp. 454, 463.

26. See for example, Clarence A. Robinson Jr., "Congress Presses Strategic Changes," *Aviation Week and Space Technology*, 10 October 1977, p. 19.

27. Lodal, "SALT II and American Security," p. 266.

28. *Ibid.*, p. 259.

29. Article XII of the treaty regarding the issue of possible technology transfers reads as follows: "In order to ensure the viability and effectiveness of this Treaty, each Party undertakes not to circumvent the provisions of the Treaty, through any other state or states, or in any other manner."

30. The most complete open source publication regarding the SALT verification issue is probably Lodal's "Verifying SALT." See also Strobe Talbott, "Scrambling and Spying in

SALT II," *International Security*, 4 (1979), 3-21, which is excerpted from Mr. Talbott's *Endgame: The Inside Story of SALT II* (New York: Harper & Row, 1979).

31. "Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems," signed in Moscow, 26 May 1972, Article XIII.

32. As an indication of the magnitude and complexity of SCC responsibilities, the new agreement entrusts to this body, *inter alia*, the requirement to determine criteria by which the parties will assess which future bombers shall be considered heavy bombers and hence counted in the SALT totals. Disagreement over these criteria was the root cause of the Backfire disputes, and nearly five years of intense negotiation failed to produce a satisfactory standard.

33. See Talbott, "Who Conceded What to Whom," pp. 33-35, for his description of the telemetry encryption issue.

34. *Ibid.*

35. Quoted in Smith, p. 19.

36. Arthur M. Schlesinger Jr., *Robert Kennedy and His Times* (Boston: Houghton Mifflin, 1978), p. 530.

